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**Bergen**

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(54) **OBJECT POINT CLOUD COMPARISON AND MATCHING**

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See application file for complete search history.

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(57) **ABSTRACT**

Point clouds of objects are compared and matched using logical arrays based on the point clouds. The point clouds are azimuth aligned and translation aligned. The point clouds are converted into logical arrays for ease of processing. Then the logical arrays are compared (e.g. using the AND function and counting matches between the two logical arrays). The comparison is done at various quantization levels to determine which quantization level is likely to give the best object comparison result. Then the object comparison is made. More than two objects may be compared and the best match found.

**18 Claims, 10 Drawing Sheets**

